CODONICS

Disinfection Technology™

User's Manual

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Codonics Disinfection Technology (CDT) manufactured by Daylight Medical, Inc. for Codonics, Inc.

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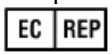

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Preface

Conventions Used in This Manual

Bulleted Lists

Bullets are used to display a list of nonprocedural items. For example:

Codonics Disinfection Technology is shipped in cartons that contain the following system components:

- Codonics Disinfection Technology Unit
- Power Cord
- Cartridge (in separate internal carton)

Numbered Steps

Numbered items indicate steps that are to be followed in a procedure. For example:

1. Toggle the **Power Switch** to the "|" position on the **Rear Panel** of the CDT unit to power on and start up the system.
2. For the initial 5 seconds of power up, there is no Front Panel LED illumination. Once 5 seconds is reached, the System light begins to flash green and system activation is audible.
3. After the 30 second system warm up process has been completed, the **System** light on the **Front Panel** will be illuminated in solid green. Additionally, the UVC bulbs will warm up and the

Cartridge LED will be illuminated in green. With those indications, the CDT unit is available for utilization.

Notes

Notes contain additional information related to a topic or procedure. For example:

NOTE: If there is no system utilization for a period of 30 minutes, the system will start a stand-by mode.

Cautions and Warnings

Cautions alert you to actions or situations that could cause harm to equipment. For example:

PRECAUTION: Never insert any object not indicated for use with the CDT.

Warnings alert you to actions or situations that could result in personal injury. For example:

WARNING: Do not place your hands inside the openings of the CDT before turning off the power.

Important Information

Bold type is used for emphasis. For example:

The **System LED** indicates the state of the CDT unit.

Purpose and Scope

Refer to this User's Manual for procedures on how to perform the Codonics Disinfection Technology operations, including:

- Unpacking the hardware
- Setting up the hardware and software
- Performing device disinfection
- Utilizing device sleeves for disinfection
- Maintaining the system and replacing the cartridge
- Monitoring the system and troubleshooting common problems

Product Information

For technical assistance with the Codonics Disinfection Technology, call Codonics Technical Support at the following number:

Phone:	+1.440.243.1198
Toll Free:	800.444.1198 (USA only)

Technical Support is available weekdays from 8:30 AM to 5:30 PM EST (U.S. holidays excluded). Technical Support is also available online via email and the Codonics web site:

Email:	support@codonics.com
Web Site:	www.codonics.com

General product information can also be requested by sending an email to:

Email:	info@codonics.com

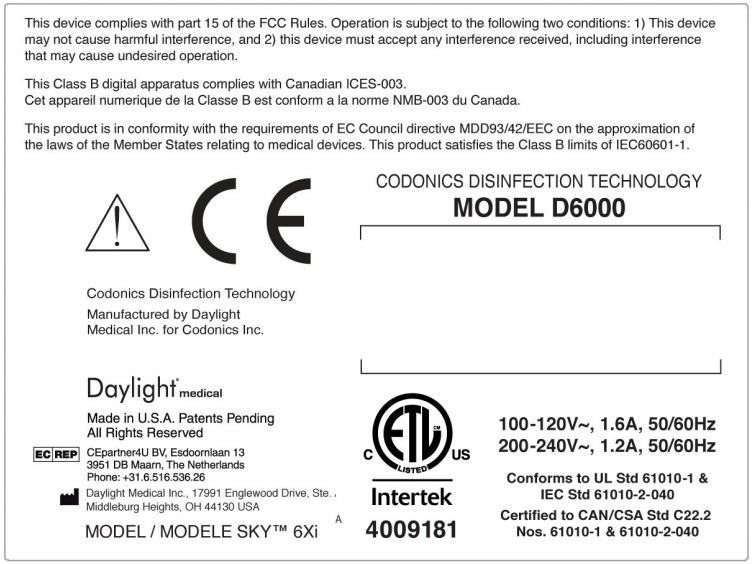
Please include your postal mailing address and telephone number in the email message. Basic product information is returned via email unless otherwise requested.

Warnings, Precautions and Limitations for Use

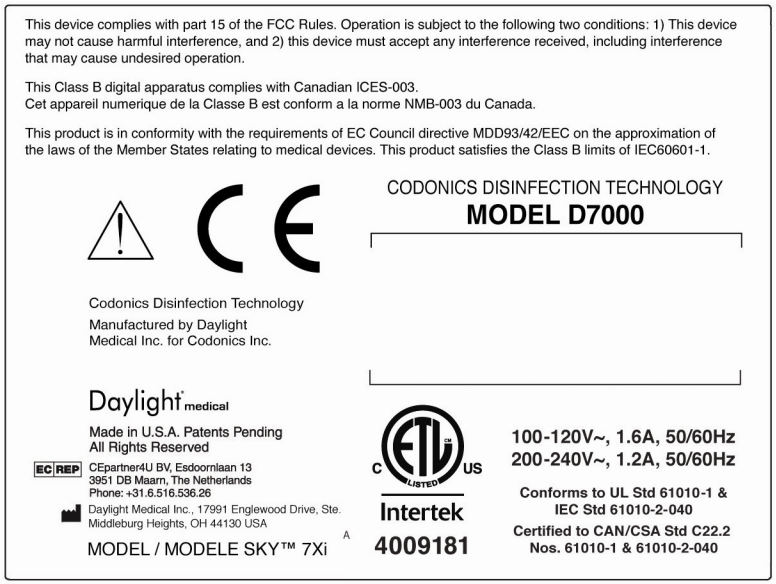
Location of Safety and Compliance Labels

Codonics Disinfection Technology manufactured by Daylight Medical, Inc. for Codonics, Inc.

Daylight Medical, Inc. is in compliance with various regulations, details of which are listed in the *Specifications* section. The CDT safety and compliance labels, shown below, are located on the rear panel (D6000) or back panel (D7000) of the device.


This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.
This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numerique de la Classe B est conform a la norme NMB-003 du Canada.
This product is in conformity with the requirements of EC Council directive MDD93/42/EEC on the approximation of the laws of the Member States relating to medical devices. This product satisfies the Class B limits of IEC60601-1.
CODONICS DISINFECTION TECHNOLOGY
MODEL D6000
Codonics Disinfection Technology
Manufactured by Daylight Medical Inc. for Codonics Inc.
Daylight medical
Made in U.S.A. Patents Pending
All Rights Reserved
EC REP
CEpartner4U BV, Esdoornlaan 13
3951 DB Maarn, The Netherlands
Phone: +31.6.516.536.26
Daylight Medical Inc., 17991 Englewood Drive, Ste. ,
Middleburg Heights, OH 44130 USA
MODEL / MODELE SKY™ 6Xi A
C US
LISTED
Intertek
4009181
100-120V~, 1.6A, 50/60Hz
200-240V~, 1.2A, 50/60Hz
Conforms to UL Std 61010-1 & IEC Std 61010-2-040
Certified to CAN/CSA Std C22.2 Nos. 61010-1 & 61010-2-040

CDT D6000 safety and compliance label


This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.
This Class B digital apparatus complies with Canadian ICES-003.
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This product is in conformity with the requirements of EC Council directive MDD93/42/EEC on the approximation of the laws of the Member States relating to medical devices. This product satisfies the Class B limits of IEC60601-1.
CODONICS DISINFECTION TECHNOLOGY
MODEL D7000
Codonics Disinfection Technology
Manufactured by Daylight Medical Inc. for Codonics Inc.
Daylight medical
Made in U.S.A. Patents Pending
All Rights Reserved
EC REP
CEpartner4U BV, Esdoornlaan 13
3951 DB Maarn, The Netherlands
Phone: +31.6.516.536.26
Daylight Medical Inc., 17991 Englewood Drive, Ste.
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Certified to CAN/CSA Std C22.2
Nos. 61010-1 & 61010-2-040

CDT D7000 safety and compliance label

Warnings and Precautions

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the device.

The lightning flash with the arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the device’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

The thermometer, within the equilateral triangle, is intended to alert the user to presence of internal components that may reach high temperatures within the device’s enclosure that may be of sufficient temperature to cause a burn.

Warnings and precautions may be found throughout this manual when specific operations are listed.

Additional precautions may be found throughout this manual when specific operations are listed.

Mises en garde et précautions

Le point d'exclamation dans un triangle équilatéral est destiné à alerter l'utilisateur de la présence d'instructions importantes de fonctionnement et d'entretien dans la documentation accompagnant l'appareil.

L'éclair avec le symbole de flèche dans un triangle équilatéral est destiné à alerter l'utilisateur de la présence d'une "tension dangereuse" dans le boîtier de l'appareil qui peut être d'une ampleur suffisante pour constituer un risque de choc électrique.

Le thermomètre, dans le triangle équilatéral, est destiné à alerter l'utilisateur de la présence de composants internes pouvant atteindre des températures élevées à l'intérieur de l'enceinte de l'appareil qui peuvent être suffisantes pour provoquer une brûlure.

Mises en garde et précautions peuvent être trouvées dans ce manuel lorsque des opérations spécifiques sont répertoriées.

Des précautions supplémentaires peuvent être trouvées dans ce manuel lorsque des opérations spécifiques sont répertoriées.

Post-Disinfection Warnings

WARNING: The Codonics Disinfection Technology is intended to disinfect non-critical medical devices. The subsequent utilization of the non-critical medical devices disinfected by the CDT is the sole responsibility of the user.

Avertissements post-désinfection

AVERTISSEMENT: La technologie de désinfection de CDT est destinée à désinfecter les dispositifs médicaux non critiques. L'utilisation ultérieure des dispositifs médicaux non critiques désinfectés par CDT est de la seule responsabilité de l'utilisateur.

Ultraviolet Light Bulb Warnings and Precautions

WARNING: Never look directly through the input and output openings of the CDT.

WARNING: Ultraviolet bulbs contain mercury and therefore must be properly disposed of as a hazardous waste in accordance with local, state, and federal regulations or the lamps should be recycled.

WARNING: Take precaution with broken UV bulbs to avoid inhalation, ingestion, or contact with skin or eye. See Chapter 4 for information about *Procedures for Disposal of Bulbs* and *Special Handling Information for Broken Bulbs*.

Mises en garde et précautions concernant les lampes UV

AVERTISSEMENT: Ne jamais regarder directement à travers les ouvertures de l'appareil CDT.

AVERTISSEMENT: les lampes UV contiennent du mercure et doivent donc être correctement éliminées comme des déchets dangereux conformément aux réglementations locales, provinciales et nationales ou les lampes doivent être recyclées.

AVERTISSEMENT: Prenez des précautions avec les ampoules UV cassées pour éviter l'inhalation, l'ingestion ou le contact avec la peau ou les yeux. Voir le Chapitre 4 pour des informations sur les *Procédures d'élimination des ampoules* et les *Consignes particulières de traitement pour les ampoules cassées*.

Safety Warnings and Precautions

WARNING: Do not place your hands inside the openings of the CDT before turning off the power.

WARNING: The CDT should not be operated by children.

WARNING: High Temperature – Internal components of CDT may develop temperatures above 110°F.

WARNING: All assembly, adjustment, modification, maintenance and/or repair should be performed by qualified personnel authorized by Codonics.

WARNING: Only CDT approved replacement parts should be used when maintaining the device.

WARNING: Do not remove any warnings, cautions, or descriptive labeling from the CDT.

WARNING: Take care when closing the front panel to avoid finger pinching.

PRECAUTION: The product must be used in accordance with this User's Guide.

PRECAUTION: Avoid spilling fluids on any part of the CDT.

PRECAUTION: If spills do occur, immediately disconnect CDT from the power source and clean the CDT.

PRECAUTION: Never insert any object not indicated for use with the CDT.

PRECAUTION: Do not use any attachments not recommended by Codonics.

Conseils de sécurité

AVERTISSEMENT: Ne placez pas vos mains à l'intérieur des ouvertures de CDT avant la mise hors tension.

AVERTISSEMENT: CDT ne doit pas être manipulé par des enfants.

AVERTISSEMENT: Haute Température – certains composants internes de CDT peuvent générer des températures supérieures à 45°C.

AVERTISSEMENT: Tout montage, réglage, modification, entretien et/ou réparation doivent être effectués par du personnel qualifié et autorisé par Codonics.

AVERTISSEMENT: Seules les pièces de rechange approuvées par Codonics peuvent être utilisées lors de la maintenance de l'appareil.

AVERTISSEMENT: Ne pas retirer les avertissements, mises en garde et étiquetages descriptifs situés sur CDT.

AVERTISSEMENT: Faites attention lors de la fermeture du panneau avant afin d'éviter tout pincement des doigts.

PRÉCAUTION: Le produit doit être utilisé conformément au Guide de l'utilisateur.

PRÉCAUTION: Évitez de renverser des liquides sur n'importe quelle partie de CDT.

PRÉCAUTION: Si des projections se produisent, débranchez immédiatement CDT de la source d'alimentation et nettoyez l'appareil.

PRÉCAUTION: Ne jamais insérer un objet non-indiqué pour une utilisation avec CDT.

PRÉCAUTION: Ne pas utiliser d'accessoires non recommandés par Codonics.

Voltage Warnings and Precautions

WARNING: This device must be electrically grounded.

WARNING: To prevent fire or shock hazard, do not expose this device to rain or moisture.

WARNING: Explosion Hazard – Do not operate the CDT in the presence of flammable vapors.

WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

WARNING: The CDT must be connected to a grounded electrical outlet to maintain grounding reliability.

WARNING: Always power off the system before cleaning. An electrical shock could occur if the system is powered on and liquid is spilled into it.

WARNING: Equipment is not to be used as a component of a life support system. Life support devices or systems are devices or systems that support or sustain life, and whose failure to perform can be reasonably expected to result in a significant injury or death to a person. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety and effectiveness.

WARNING: Failure to insert the **Voltage Selector Plug** in the proper voltage orientation will cause the fuses in the **Voltage Selector Plug** to blow and will require the user to replace the fuses prior to restore operation. Fuses are not covered under warranty.

PRECAUTION: Never operate CDT if it has a damaged power cord, power supply or plug. If the power cord, power supply or plug is worn or damaged, contact Codonics at +1.440.243.1198.

PRECAUTION: The electrical installation of the room in which CDT will be operated must comply with the local electrical wiring standards.

Mises en garde et précautions concernant la tension

AVERTISSEMENT: Cet appareil doit être relié électriquement à la terre.

AVERTISSEMENT: Pour éviter un incendie ou un choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

AVERTISSEMENT: Risque d'explosion - Ne pas faire fonctionner CDT en présence de vapeurs inflammables.

AVERTISSEMENT: Débranchez le cordon d'alimentation de la prise murale avant de réparer CDT afin d'éviter tout risque de choc électrique.

AVERTISSEMENT: Éteignez le système avant d'ouvrir le panneau avant afin d'éviter tout risque de choc électrique.

AVERTISSEMENT: CDT doit être connecté à une prise de terre électrique afin de maintenir la fiabilité électrique.

AVERTISSEMENT: Toujours éteindre le système avant de le nettoyer. Si le système est sous-tension lorsque du liquide est renversé à l'intérieur, un choc électrique peut se produire.

AVERTISSEMENT: L'équipement ne doit pas être considéré comme composant d'un respirateur artificiel. Les respirateurs artificiels sont des dispositifs ou des systèmes destinés à maintenir la vie, et dont le mauvais fonctionnement peut conduire à une blessure sévère, voire à la mort, d'une personne. Un composant essentiel est un composant provenant d'un respirateur artificiel dont le mauvais fonctionnement peut provoquer la panne du respirateur artificiel, ou porter atteinte à sa sécurité et à son efficacité.

AVERTISSEMENT: Brancher le sélecteur de tension dans le mauvais sens de tension provoque l'explosion des fusibles dans le sélecteur de tension. L'utilisateur devra alors remplacer les fusibles avant de rétablir le fonctionnement. Les fusibles ne sont pas couverts par la garantie.

PRÉCAUTION: Ne faites jamais fonctionner CDT lorsque l'alimentation, le cordon d'alimentation et/ou la prise sont endommagés. Si le cordon d'alimentation, l'alimentation ou la prise sont usés ou endommagés, contactez Codonics. au +1.440.243.1198.

PRÉCAUTION: L'installation électrique de la pièce dans laquelle CDT sera utilisé doit être conforme aux normes locales de câblage électrique.

Location Warnings and Precautions

PRECAUTION: When removing the CDT, hold under the front and rear of the system. Do not lift the system by the foam packaging.

PRECAUTION: The CDT weighs 35 to 44 lbs (15 to 19 kg). To avoid injury, use two people to unpack and position the device.

PRECAUTION: Placement of the CDT on a cart or stand must have at least 4 inches separation between the CDT back panel and the wall behind it.

PRECAUTION: Do not place any objects over 40 lbs. (18.18 kg) on the top lid of the Double-Pass model. See Chapter 3 for information about *Double-Pass Processing Technique Model.*

PRECAUTION: Keep the CDT away from heated surfaces.

Mises en garde et précautions concernant la mise en place de l'appareil

PRÉCAUTION: Lors du retrait de CDT de son emballage, tenir sous l'avant et à l'arrière du système. Ne soulevez pas le système par l'emballage en mousse.

PRÉCAUTION: CDT pèse 15 to 19 kg (35 to 44 lbs). Afin d'éviter toute blessure, deux personnes sont nécessaires pour déballer et installer l'appareil.

PRÉCAUTION: Lorsque CDT est placé sur un chariot ou un support, prévoir un espace de séparation d'au moins 15 cm entre le panneau arrière de CDT et le mur.

PRÉCAUTION: Ne pas poser d'objet de plus de 18,00 kg (40 lbs) sur le dessus du modèle Double-Pass. Consultez le Chapitre 3 pour plus d'informations.

PRÉCAUTION: Tenez CDT éloigné des surfaces chauffées.

Cleaning Precautions

PRECAUTION: Refer to the *Cleaning the Enclosure* section for recommended cleaning of the CDT.

PRECAUTION: Apply the cleaner to a clean, lint-free cloth first and then clean the device. Liquid applied directly to the device could possibly leak inside and cause damage. Use extra caution when cleaning around the front panel display.

PRECAUTION: Allow the device to completely dry before operating again.

PRECAUTION: Never use abrasive materials.

PRECAUTION: Never use any disinfecting agents that corrode.

PRECAUTION: Always dilute cleaning agents according to the manufacturer's instructions, or use the lowest possible concentration.

PRECAUTION: Do not allow the cleaning agent to remain on the device surface. Wipe off immediately with a lint-free cloth moistened with water. Failure to do so may result in discoloration of the surface.

WARNING: Codonics makes no claims regarding the efficacy of the listed chemicals or methods as a means of controlling infection. Consult your hospital's infection control officer or epidemiologist.

Précautions de nettoyage

PRÉCAUTION: Reportez-vous à la section *Nettoyage du boîtier,* recommandée pour le nettoyage de CDT.

PRÉCAUTION: Appliquez le nettoyant sur un chiffon propre et non pelucheux, puis nettoyez l'appareil. Tout liquide appliqué directement sur l'appareil pourrait couler à l'intérieur et causer des dégâts. Faites preuve de prudence lors du nettoyage autour de l'afficheur du panneau frontal.

PRÉCAUTION: Laissez l'appareil sécher complètement avant de le réutiliser.

PRÉCAUTION: Ne jamais utiliser de produits abrasifs.

PRÉCAUTION: Ne jamais utiliser de produits de désinfection corrosifs.

PRÉCAUTION: Toujours diluer les produits de nettoyage selon les instructions du fabricant, ou utiliser la concentration la plus faible possible.

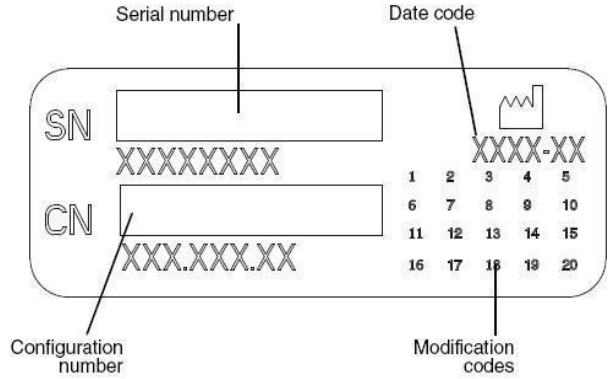
PRÉCAUTION: Ne pas laisser agir le produit de nettoyage sur la surface du dispositif. Essuyez-le immédiatement avec un chiffon non pelucheux et humidifié avec de l'eau. Ne pas le faire pourrait entraîner une décoloration de la surface.

AVERTISSEMENT: Codonics n'émet aucun jugement quant à l'efficacité des produits chimiques ou d'autres méthodes énumérées comme un moyen de contrôle des infections. Consultez l'hygiéniste ou l'épidémiologiste de contrôle de votre hôpital.

Serial Number, Configuration, Date Code, and Modification Codes

The serial number label is placed onto the safety and compliance label. The serial number label includes the following information:

- The serial number (SN), which uniquely identifies the unit.
- The configuration number (CN), which details the build configuration.
- The modification codes, which are to the right of the CN number and are a series of 20 numbers. When any of these numbers are blocked out, that identifies a modification that was made to the unit.
- The date code in YYYY-MM format is located below the factory date code symbol.



Serial number label

Potential for Radio Frequency Interference on Device Operation

Both portable and mobile RF communications equipment can affect medical electrical equipment, including the CDT. The CDT is intended for use in the electromagnetic environment specified in the *Guidance and Manufacturer's Declaration* section.

Potential for Radio and Television Interference

The CDT generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with Class B emission limits for a computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operating in a commercial environment. The CDT is not intended for use in a residential Class A environment. The CDT requires a medical power/ground. If your CDT does cause interference to radio or television reception, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the CDT with respect to the receiver.

If necessary, you should consult Codonics Technical Support or an experienced radio/television technician for additional suggestions. You may find the following booklet prepared by the Federal Communications Commission helpful: *How to Identify and Resolve Radio-TV Interference Problems*. This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

Le présent appareil numérique n'émet pas de bruits radio-électriques dépassant les limites applicables aux appareils numériques de la Classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par le ministére des Communications du Canada.

Guidance and Manufacturer's Declaration – Electromagnetic Emissions

The CDT is intended for use in the electromagnetic environment specified below. The customer or the user of the CDT should assure that it is used in such an environment.

CDT is third-party tested and verified compliant with UL 61010-1, CSA 61010-1, IEC 61010-2-040, EN 60601-1-2-2007 3rd Edition, IEC 60601-1-2-207 3rd Edition, Class B Emissions and Immunity for non-life supporting equipment. JIS T 0601-1-2012 as follows:

Emissions Test	Compliance	Electromagnetic Environment – Guidance
RF Emissions CISPR 11/EN 55011	Class B	Electromagnetic compatibility – Generic standards – Emission standard for residential, commercial, and light-industrial environments.
Harmonic Emission IEC/EN 61000-3-2	Class A	
Voltage Fluctuations/Flicker Emissions IEC/EN 61000-3-3	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The CDT is intended for use in the electromagnetic environment specified below. The customer or the user of the CDT should assure that it is used in such an environment.

Immunity Test	Test Level	Compliance Level	Electromagnetic Environment – Guidance
Electrostatic Discharge (ESD) IEC/EN 61000-4-2	Contact Air	6 KV Pass 8 KV Pass	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Radiated, Radio-Frequency, Electromagnetic Field Immunity IEC/EN 61000-4-3		Pass	
Electrical Fast Transient/Burst IEC/EN 61000-4-4	100 – 240 VAC 50/60 HZ	Pass	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC/EN 610000-4-5	100 – 240 VAC 50/60 HZ	Pass	Main power quality should be that of a typical commercial or hospital environment.
Conducted, Radio Frequency, Electromagnetic Field Immunity IEC/EN 61000-4-6		Pass	

Immunity Test	Test Level	Compliance Level	Electromagnetic Environment – Guidance
Power Frequency Magnetic Field Immunity Test IEC/EN 61000-4-8	50/60 HZ	Pass	
Voltage Dips, Shot Interruptions, and Voltage Variations on Power Supply Input Lines IEC/EN 61000-4-11	100 – 240 VAC 50/60 HZ	Pass	Main power quality should be that of a typical commercial or hospital environment. If the user of the CDT requires continued operation during main power interruptions, it is recommended that the CDT be powered from an uninterruptible power supply or battery.

Disposal Requirements

Disposal of this product and consumables shall be in accordance with all applicable laws and regulations in effect at the locality at the time of disposal. For additional information, refer to *Hazardous Material Information* section.

Conditions et Règles d'Utilisation

L'utilisation de ce produit doit être conforme à toutes les lois et règlements applicables sur le lieu d'utilisation.

European Disposal Requirements

Codonics Disinfection Technology and accessories are not to be discarded or recycled; rather they are to be returned to the manufacturer. Contact Codonics directly or by the email link provided for the latest information concerning:

Identification of the country-specific Importer/Distributor/Producer

Product return and treatment of our electronic products

Codonics Incorporated
17991 Englewood Drive
Middleburg Heights, Ohio 44130 USA
Phone: +1.440-243-1198
Fax: +1.440.243.1334
Email: WEEE@codonics.com
Web Site: www.codonics.com

Codonics electronic products and accessories bearing the following symbol are subject to European Directive of Waste Electrical and Electronic Equipment (WEEE) 2002/96/EC, amended by Directive 2003/108/EC. The EN 50419 symbol indicates separate collection and return required.

EN 50419 symbol

Indications for Use

Intended Use

The CDT disinfection system is intended to allow authorized trained personnel within the hospital the ability to disinfect a non-critical device (NCD) on demand. Non-critical medical devices make only topical contact with intact skin. Devices suitable for CDT application are smart phones, iPads, tablet PCs and other thin format touch-display devices used in a healthcare environment. CDT is not intended to be used to pre-clean or decontaminate critical or semi-critical medical devices prior to terminal sterilization or high level disinfection.

Device Indications for Use Statement

The CDT disinfection function is achieved through the application of high intensity germicidal UVC light applied at a known intensity and for a known duration. The intention is to allow the user to insert the NCD into the system for disinfection. The user may also elect to place the NCD into a specially designed and manufactured sleeve before processing. The benefit of using the sleeve is to minimize, to the extent possible, any accumulated soil on the NCD and reduce reliance on user diligence for the best possible outcome. Operation of the system is to take place outside of sterile fields and by personnel performing their duties outside of sterile fields. Typical operating personnel are nurses and physicians.

1

Chapter 1: Introduction

Welcome

Thank you for your purchase of Codonics Disinfection Technology.

CDT D6000 "Double-Pass" Model

CDT D7000 “Pass-Through” Model

We are pleased that you chose Codonics Disinfection Technology. We are confident that it will provide safe and effective disinfection for your portable electronic devices.

NOTE: CDT models have various face plates and encasements (rounded or square corners) and all use the same disinfection technology and share functionality.

Product Features

The Codonics Disinfection Technology is a simple device utilizing ultraviolet C spectrum light to disinfect non-critical devices such as smart phones, iPads, tablet PCs and other thin format touch-display devices.

Note: CDT is intended for flat surface devices only and should not be used with any devices that have protrusions.

System Features

- The system enables medical personnel to safely use a portable electronic device, for example, an iPad®, iPhone®, smart phone, or tablet PC in the medical environment where disinfection is appropriate.
- The system uses a disposable, user replaceable cartridge that contains the ultraviolet C (UVC) bulbs and perishable items.
- The geometry and proximity of the ultraviolet C (UVC) bulbs to the object being processed allows 100% coverage of the device.

- The object being processed is unobstructed in the region the disinfecting action is taking place allowing maximum exposure to be applied to the device.
- The transport rollers act both to convey the object and block ultraviolet C (UVC) from escaping the system.
- The system allows for the use of specially designed ultraviolet C (UVC) transmissive sleeves to allow the broadest use of the device in accord with customer requests for speed, ease of use, and use location.
- The system continuously monitors ultraviolet C (UVC) output to ensure at least a given UVC exposure occurs or the system becomes disabled and alerts the user.

Operational Features

- Easy to service with Codonics Return to Factory Warranty. An optional Express Warranty program is also available, which provides a replacement CDT if the problem cannot be solved by our technical support team.

2

Chapter 2: Setting Up the System

Finding a Location for the System

When finding a suitable location for the system, use the following guidelines (along with the information in the *Location Warnings and Precautions* section):

- Place the system in a location with adequate air circulation to prevent internal heat build up.
- Do not place the system near heat sources such as radiators or air ducts, or in a location subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Make sure that the countertop or work surface supporting the system is level, can support the weight, and will not vibrate or shake when the system is operating.

Shipped Components

The CDT is shipped in cartons that contain the following system components:

- Codonics Disinfection Technology Unit

- Power Cord
- Cartridge (in separate internal carton)
- Literature: including User's Manual, Quick Set Up/Reference Guide, Warranty

Inspect the cartons for damage that might have occurred during shipping. Report any damage to the shipping company.

Save the cartons and packing materials in case you ever need to transport the CDT later.

PRECAUTION: When removing the CDT, hold under the front and rear of the system. Do not lift the system by the foam packaging.

PRECAUTION: The CDT weighs 35 to 44 lbs (15 to 19 kg). To avoid injury, use two people to unpack and position the device.

NOTE: Electronic copies of the CDT software and user documentation may be downloaded from www.codonics.com.

Identifying the Components

CDT Front Components

CDT front components (D6000 shown)

- The **System LED** indicates the state of the CDT.

  The following LED lighting conditions will be presented:

  - Slow flashing green indicates that the system is in stand-by mode. The **Cartridge** LED light will be illuminated with its current status.

- Flashing green **System LED** indicates that the system is starting up or warming up from a stand-by mode session.

- Flashing green **System LED** at two-second interval indicates that the system is processing a device for disinfection. The flashing is displayed during the entire process from entry to exit.

- Green **System LED** indicates system is functional and ready for use.

- Red and flashing red **System LED** indicate a fault/error condition.

NOTE: If the red System LED is illuminated, the CDT should be powered down and troubleshooting steps should be taken as described in the *Troubleshooting* section.

- The **Cartridge LED** indicates the remaining life of the cartridge, which contains the ultraviolet C (UVC) bulbs and other components which will wear out with system usage.

  The following **Cartridge** LED lighting conditions will be presented:

  - Green indicates 100% to 25% of cycles remaining.

  - Yellow indicates 25% to 1% of cycles remaining - prepare to replace cartridge.

  - Red indicates that the cartridge needs to be replaced.

NOTE: If the red Cartridge LED is illuminated, the CDT should be powered down for a Cartridge replacement as described in the *Installing the Cartridge* section.

- The **Entry Slot** is the location in which an item will be placed to process in the system.
- The **Check Mark Light** is flashed to notify the user that the disinfection process is completed.
- The **Cancel Button** is pressed by the user once to reverse the transport direction or twice in succession to fully stop the disinfection process due to a jammed condition or other problems.
- The **Open Button** is pressed by the user, then pulled out, to perform servicing and cartridge replacement.

WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

"Pass-Through" Model (D7000) Receiving Area Components

CDT D7000 Receiving Area components

- The **Receiving Area** provides access to the user for items that have been processed through the disinfection cycle.

- The **Receiving Area Pad** allows items to be gently released after disinfection processing has been completed.

- The **Receiving Area Door** blocks the low level UVC light that is gently disinfecting the **Receiving Area** and enables user access to processed items.

Components Inside CDT Front Panel

Components inside CDT front panel

- The **Cartridge** contains ultraviolet C (UVC) bulbs and other perishable items. Refer to the *Installing the Cartridge* section.

- The (secure digital) **SD Card Slot** provides a port to update or reload software. Refer to the *Installing Software* section.

- The **Hide Track** (the disinfection route behind the **Cartridge**) provides for user access to remove a jammed item. This is utilized for the Double-Pass style models.

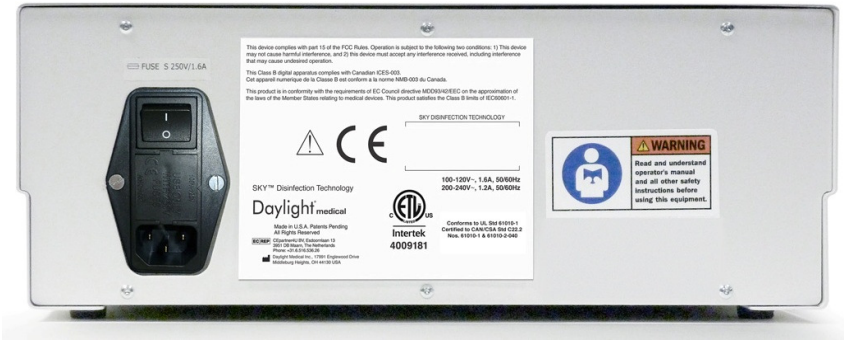
WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

WARNING: Never look directly through the input and output openings of the CDT.

WARNING: Take care when closing the front panel to avoid finger pinching.

CDT Rear Components



CDT rear components (D6000 shown)

- The **Power Input Port** is used to connect the **Power Cord**. The **Power Input Port** allows for either 100 – 120 volt or 200 – 240 volt **Power Cords**.

- The **Power Switch** powers the CDT on and off. Toggle the **Power Switch** to the "I" position for on and to the "O" position for off.

"Pass-Through" Model (D7000) Back Panel Components

- The **Auto-Lift Hinge** easily raises the **Tray** after the user starts the lifting process after pushing the **Open** button on the **Front Panel**.
- The **Mounting Stand** vertically positions the D7000 model for pass-through processing.

CDT D7000 Back Panel components

Installing the Cartridge

The **Cartridge** for the disinfection process utilizes ultraviolet C (UVC) bulbs and other perishable items. Depending upon utilization of the CDT, the **Cartridge** is typically expected to be replaced annually. Refer to the *CDT Front Panel* section regarding the LED indicators about the life cycle status for the installed **Cartridge**.

The following steps may be performed to install a new **Cartridge**:

NOTE: The CDT D6000 unit must be in a horizontal position to replace the Cartridge. The CDT D7000 unit may be in a vertical position to replace the cartridge.

NOTE: The CDT D7000 unit includes an Auto-Lift Hinge that easily raises the Tray after the user starts the lifting process.

1. Locate the **Cartridge** included with your CDT (or future replacement **Cartridges** purchased separately).

NOTE: The use of unapproved parts including the Cartridge will void the Codonics warranty for the CDT unit. See the Ordering Supplies and Parts section.

2. Toggle the **Power Switch** to the "O" position on the rear of the CDT to power off the system.

3. Disconnect the **Power Cord** from the wall outlet.

4. Press the **Open** button on the **Front Panel** of the CDT.

5. Pull forward on the CDT D6000 **Front Panel** to expose the device **Tray** or on the D7000, first push down on the front panel and then pull up on the knob to expose the device **Tray**. The downward pushing motion is required to release the safety interlock in the knob to allow the tray to be lifted.

NOTE: The CDT D7000 model includes a louver which is used to block UVC light when the **Receiving Area Door** is raised. This louver may need to be held down when installing and/or replacing the **Cartridge**.

6. Install the **Cartridge** by aligning it with the two metal vertical pins and pushing it down to interlock with the white electronics connector. Hold the Cartridge by its handles, which are yellow in color.

7. Close the **Front Panel** by pushing it into the unit and push the **Open** button until it locks.

CDT cartridge loading

8. Upon the **Cartridge** being detected in the system, the **Cartridge** LED light on the **Front Panel** will be illuminated in green.

WARNING: Only CDT approved replacement parts should be used when maintaining the device.

WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

WARNING: Never look directly through the input and output openings of the CDT.

Connecting the Power Cord

1. Locate the **Voltage Selector Plug** included with your CDT noting the side of the plug with raised numerals showing the voltage range appropriate for your region.

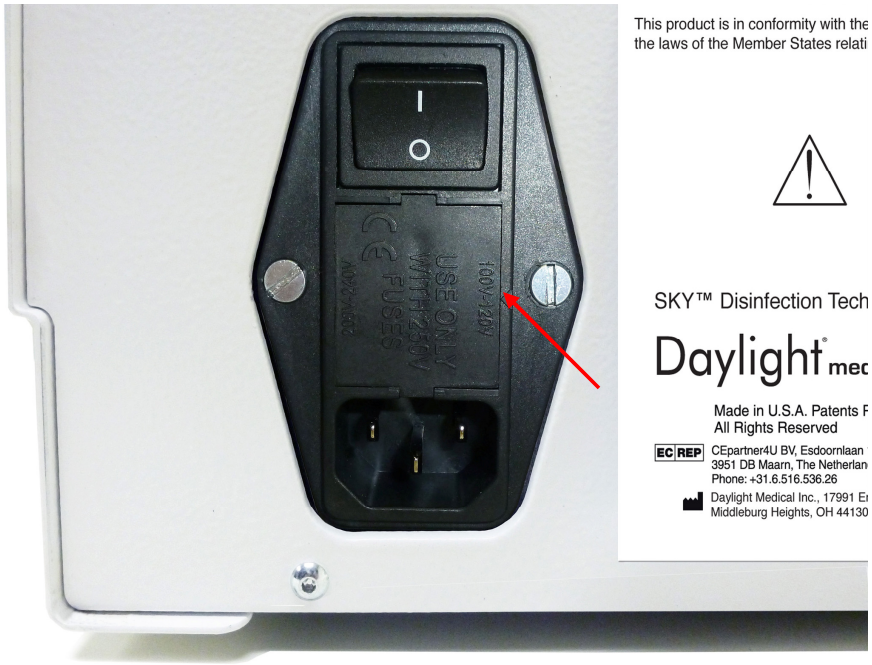
NOTE: The **Voltage Selector Plug** will be factory set for your region.

2. Locate the **Electrical Socket** on the rear of the CDT noting the location of the recess for the **Voltage Selector Plug** and **Applied Voltage Arrow** on the right hand side of the electrical socket.

3. With the raised numerals on the **Voltage Selector Plug** showing the voltage range (100-120 or 220-240) appropriate for your region closest to the **Applied Voltage Arrow** on the **Electrical Socket**, insert the **Voltage Selector Plug** in to the recess until fully seated.

4. Verify that the **Applied Voltage Arrow** points to the voltage range appropriate for your region (see figure on following page).

NOTE: In the D7000 model, it is recommended to view the **Applied Voltage Arrow** when the **Tray** is released and in the upward most position and with an open **Receiving Area Door**. A portable light source may be required for ideal viewing.


This product is in conformity with the
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CEpartner4U BV, Esdoornlaan
3951 DB Maarn, The Netherlan
Phone: +31.6.516.536.26
Daylight Medical Inc., 17991 E
Middleburg Heights, OH 44130
USE ONLY WITH 250V FUSES

CDT electrical socket (D6000 shown)

5. Locate the **Power Cord** included with your CDT.

6. Plug the **Power Cord** into the **Power Input Port** (either 100–120 volts or 200–240 volts) on the **Rear Panel** of the CDT.

NOTE: In the D7000 model, the Power Cord is factory connected.

NOTE: In the D7000 model, it is recommended to insert the **Power Cord** when the **Tray** is released and in the upward most position and then the **Power Input Port** may be accessed from the front of the unit through the **Receiving Area Door**. The **Power Switch** is also most easily accessed in this manner.

7. Connect the **Power Cord** to a grounded power outlet that supplies the appropriate voltage for the applicable country.

CDT power cord connection (D6000 shown)

WARNING: The power cord is the main disconnect for the device. The power outlet should be near the device and be easily accessible.

WARNING: The CDT must be connected to a grounded electrical outlet to maintain grounding reliability.

WARNING: Remove the power cord from the power outlet to disconnect overall power to the device.

WARNING: Failure to insert the **Voltage Selector Plug** in the proper voltage orientation will cause the fuses in the **Voltage Selector Plug** to blow and will require the user to replace the fuses prior to restore operation. Fuses are not covered under warranty.

Once the **Power Cord** is connected, the CDT can be powered on and off using the **Power Switch** on the **Rear Panel**.

Powering the System

1. Toggle the **Power Switch** to the "|" position on the **Rear Panel** of the CDT to power on and start up the system.

NOTE: In the D7000 model, it is recommended to access the **Power Switch** when the **Tray** is released and in the upward most position. The **Power Switch** may be accessed from the front of the unit through the **Receiving Area Door**.

CDT power switch (D6000 shown)

2. For the initial 5 seconds of power up, there is no Front Panel LED illumination. Once 5 seconds is reached, the System light begins to flash green and system activation is audible.

3. After the 30 second system warm up process has been completed, the **System** light on the **Front Panel** will be illuminated in solid green. Additionally, the UVC bulbs will warm up and the Cartridge LED will be illuminated in green. With those indications, the CDT is available for utilization.

4. To power off the system, toggle the **Power Switch** to the "O" position on the rear of the CDT to power off the system.

NOTE: If there is no system utilization for a period of 30 minutes, the system will start a stand-by mode.

NOTE: When the Open button on the Front Panel is pressed and the tray begins to move forward, the power to the system is immediately turned off as a safety mechanism.

3

Chapter 3: Disinfection Operations

There are two models – Double-Pass (D6000) and Pass-Through (D7000) – of the Codonics Disinfection Technology, which are utilized for disinfecting non-critical devices. The processing technique for both models is described below.

"Double-Pass" (CDT D6000) Processing Technique

In the "Double-Pass" model, all items to be processed are placed into either one single or two nested ultraviolet C (UVC) transmissive sleeves (each with a photochromic marker if that option is present) before being placed into the system. In this model, the use of at least one sleeve is required. For the greatest infection defense possible, we recommend using the nested sleeve option, discarding the outer sleeve after processing and using the device while inside the remaining sleeve. Both the sleeve and the device are being disinfected, but using the device in the sleeve acts to minimize the accumulation of pathogens in device recesses.

Placement into the **Entry Slot** requires that the item is face (screen) down with the sleeve closure (zip or flap) entered first (leading edge).

NOTE: Not all device cases may be processed through CDT due to the surface area presented.

NOTE: Using any sleeve other than Codonics Disinfection Sleeves is prohibited. Do not use CDT Sleeves in any other disinfection device, or without first enclosing your device in a CDT Sleeve and processing it in CDT.

The item is fed into the **Entry Slot** on the **Front Panel** of the CDT. A sensor detects the feeding of an item into the **Entry Slot**, which activates the transport mechanism for the disinfection process to be started. The item is processed and automatically returned to the user at the **Entry Slot** in the **Front Panel**.

The System LED will flash in green with a two-second interval indicating that the system is processing a device for disinfection. The flashing is displayed during the entire process from entry to exit.

NOTE: When the Open button on the Front Panel is pressed and the drawer is moved, the power to the system is immediately turned off as a safety mechanism. It is recommended to fully power off the system prior to opening the Front Panel by toggling the ***Power Switch*** *to the "O" position on the rear of the CDT unit.*

NOTE: A multi-stage UVC blocking mechanism is employed to automatically block UVC light from being emitted from the system and these safeguards must remain in place. Do not bypass or remove these safeguards.

The **Check Mark** light on the **Front Panel** flashes in green indicating that the process was completed successfully, and the disinfected item will quickly be returned to the user at the **Entry Slot** for removal.

CDT's check mark illuminated in green showing completed disinfection

The photochromic marker on the sleeves will change in color revealing a check mark indicating that the process was completed successfully.

*Double-sleeved iPad **before** disinfection*

*Double-sleeved iPad **after** disinfection*

Once run through the CDT, the sleeved item can be taken into medical settings where infection prevention is desirable. In practice, the outer sleeve is removed once the device has been processed and taken to the use location. The device is then used while remaining in the interior sleeve. After use, the interior sleeve is discarded.

"Pass-Through" (CDT D7000) Processing Technique

The "Pass-Through" model is a variation of the "Double-Pass" model, which provides additional options including the following:

- Option to process items without CDT sleeves.
- Faster processing by eliminating the return cycle.
- Smaller footprint by vertical mounting the unit to a base.

The “Pass-Through” model includes a **Receiving Area** for easy access by the user to processed items. The **Receiving Area** is gently disinfected by low-level UVC light to protect the area from any possible contamination by users retrieving their devices. The **Receiving Area Door** blocks UVC light from emitting from the **Receiving Area** and lifting the **Receiving Area Door** automatically deflects UVC away from the **Receiving Area** until the door is again lowered completely.

In the “Pass-Through” model, items can be processed without sleeves or they can optionally be placed into either one single or two nested ultraviolet C (UVC) transmissive sleeves (each with a photochromic marker if that option is present) before being placed into the system. For the greatest infection defense possible, we recommend using the nested sleeve option, discarding the outer sleeve after processing and using the device while inside the remaining sleeve. Both the sleeve and the device are being disinfected, but using the device in the sleeve acts to minimize the accumulation of pathogens in device recesses.

Placement into the **Entry Slot** requires that the item is face (screen) toward the back of the CDT. Optionally, if sleeves are utilized for processing, the sleeve closure (zip or flap) is required to be entered first (leading edge).

NOTE: Not all device cases may be processed through CDT due to the surface area presented.

NOTE: Using any sleeve other than Codonics Disinfection Technology Sleeves is prohibited. Do not use CDT Sleeves in any other disinfection device, or without first enclosing your device in a CDT Sleeve and processing it in CDT.

The item is fed into the **Entry Slot** on the **Front Panel** of the CDT. The user should optimally place the item in the center most position, left to right, of the **Entry Slot**.

A sensor detects the feeding of an item into the **Entry Slot**, which activates the transport mechanism for the disinfection process to be started. The item is processed through CDT and gently released onto the **Receiving Area Pad** in the **Receiving Area**. To access the processed item, the user simply raises the **Receiving Area Door** to retrieve it. Larger items such as tablets are intended to be retrieved from the lower edge by the user while gripping it through the notches of the **Receiving Area Pad**.

The System LED will flash in green with a two-second interval indicating that the system is processing a device for disinfection. The flashing is displayed during the entire process from entry to exit.

NOTE: When the Open button on the Front Panel is pressed and the drawer is moved, the power to the system is immediately turned off as a safety mechanism.

NOTE: A multi-stage UVC blocking mechanism is employed to automatically block UVC light from being emitted from the system and these safeguards must remain in place. Do not bypass or remove these safeguards.

The **Check Mark** light on the **Front Panel** flashes in green indicating that the process was completed successfully, and the disinfected item will be presented in the Receiving Area for removal.

WARNING: The Codonics Disinfection Technology is intended to disinfect non-critical medical devices. The subsequent utilization of the non-critical medical devices disinfected by the CDT is the sole responsibility of the user.

WARNING: Do not place your hands inside the openings of the CDT before turning off the power.

WARNING: The CDT should not be operated by children.

WARNING: High Temperature – Internal components of CDT may develop temperatures above 110°F.

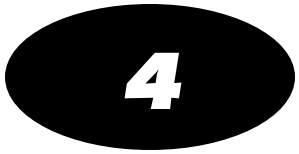
PRECAUTION: The product must be used in accordance with this User's Guide.

PRECAUTION: Avoid spilling fluids on any part of the CDT.

PRECAUTION: If spills do occur, immediately disconnect CDT from the power source and clean the CDT.

PRECAUTION: Never insert any object not indicated for use with the CDT.

PRECAUTION: Do not use any attachments not recommended by Codonics.



Chapter 4: Maintenance

Ordering Supplies and Parts

The following table lists the supplies and parts that can be ordered from Codonics:

Parts	Catalog Number
Sleeves	Various sizes and styles available from smart phones to tablet PCs – Please contact your Codonics Customer Service Representative.
Cartridge	CDT-CARTRIDGE

To order supplies and parts, contact Codonics Customer Service at:

Phone:	+1.440.243.1198 (non-US customers)
Toll Free:	1.800.444.1198
Fax:	+1.440.243.1334
Email:	info@codonics.com
Web Site:	www.codonics.com

NOTE: The use of unapproved parts will void the Codonics warranty for the CDT unit.

NOTE: There are no user-serviceable parts inside the CDT unit.

NOTE: Using any sleeve other than Codonics Disinfection Technology Sleeve is prohibited. Do not use CDT Sleeves in any other disinfection device, or without first enclosing your device in a CDT Sleeve and processing it in CDT.

Procedures for Disposal of UVC Bulbs

If bulbs are broken, ventilate the area where breakage occurred. Clean up with mercury vacuum cleaner or other suitable means that avoid dust and mercury vapor generation. Take usual precautions for collection of broken glass. Clean up requires special care due to mercury droplet proliferation. Place materials in closed containers to avoid generating dust. It is the responsibility of the generator to ensure proper classification of waste products. To that end, TCLP tests should be conducted on all waste products to determine the ultimate disposition in accordance with all applicable federal, state and local regulations.

Special Handling Information for Broken UVC Bulbs

Ventilation: Use adequate general and local exhaust ventilation to maintain exposure levels below the PEL or TLV limits. If such ventilation is unavailable, use respirators as specified below.

Respiratory Protection: Use appropriate NIOSH approved respirator if airborne dust concentrations exceed the PEL or TLV limits. All appropriate requirements set forth in 29 CFR 1910.134 should be met.

Eye Protection: OSHA specified safety glasses, goggles or face shield are recommended if bulbs are broken.

Hygienic Practices: After handling broken bulbs, wash thoroughly before eating, smoking or using toilet facilities.

Cleaning the Enclosure

PRECAUTION: Avoid spilling fluids on any part of the CDT.

PRECAUTION: If spills do occur, immediately disconnect CDT from the power source and clean the CDT.

WARNING: Always power off the system before cleaning. An electrical shock could occur if the system is powered on and liquid is spilled into it.

NOTE: Refer to the Powering the System section.

To clean the system's enclosure without physical or cosmetic degradation, use a clean, lint-free cloth moistened with one of the following:

- Phenolic Disinfectant Cleaner (meets VII.d.4 of AORN recommendation)
- 1 part household bleach and 5 parts water (meets VII.e.2. of AORN recommendation)
- A-456-N Disinfectant
- Virex256 Disinfectant
- Isopropyl Alcohol, 70% solution

The following pre-moistened disposable cloths may also be used for cleaning the enclosure:

- PDI Sani-Cloth HB
- PDI Sani-Cloth PLUS
- PDI Super Sani-Cloth

Cleaning Precautions

To avoid damage to the device, observe the following general precautions for cleaning the device:

PRECAUTION: Apply the cleaner to a clean, lint-free cloth first and then clean the device. Liquid applied directly to the device could possibly leak inside and cause damage. Use extra caution when cleaning around the front panel display.

PRECAUTION: Allow the device to completely dry before operating again.

PRECAUTION: Never use abrasive materials.

PRECAUTION: Never use any disinfecting agents that corrode.

PRECAUTION: Always dilute cleaning agents according to the manufacturer's instructions, or use the lowest possible concentration.

PRECAUTION: Do not allow the cleaning agent to remain on the device surface. Wipe off immediately with a lint-free cloth moistened with water.

WARNING: Codonics makes no claims regarding the efficacy of the listed chemicals or methods as a means of controlling infection. Consult your hospital's infection control officer or epidemiologist.

Installing Software

Software Installation

The software installation process may be performed with a secure digital (SD) card, following these steps:

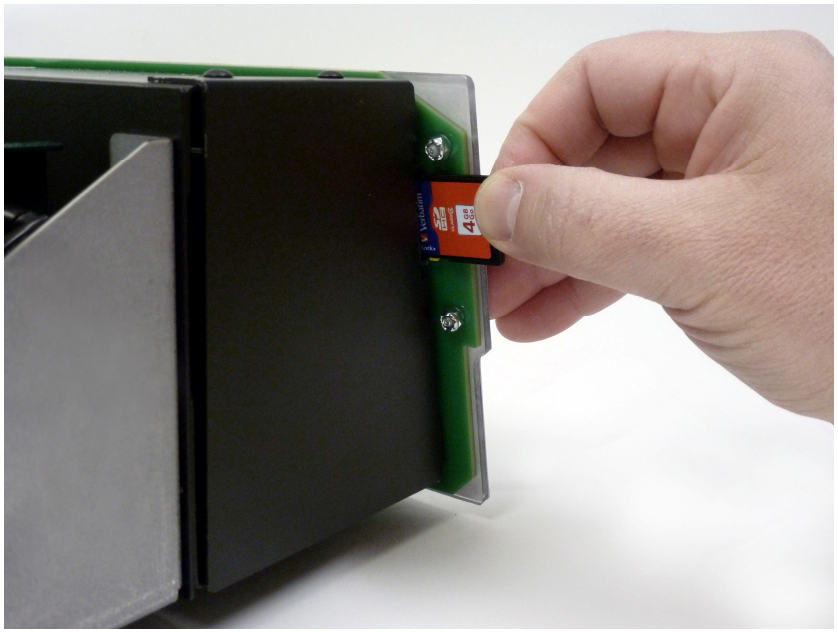
1. Toggle the **Power Switch** to the "O" position on the rear of the CDT to power off the system.

2. Unplug the **Power Cord** from the wall outlet.

3. Press the **Open** button on the **Front Panel** of the CDT.

4. Pull forward on the **Front Panel** to expose the device **Tray**.

5. Insert the SD card into the **SD Card Slot** on the left side.



SD Card Insertion for Software Installation

6. Close the **Front Panel** by pushing it into the unit and push the **Open** button until it locks.

7. Plug the **Power Cord** into the wall outlet.

8. Toggle the **Power Switch** to the “I” position on the rear of the CDT to power on the system.

9. Upon completion of the software update, the **System** LED light on the **Front Panel** will flash green.

*NOTE: If the software upgrade fails, the **System** LED light on the **Front Panel** will flash red.*

10. Toggle the **Power Switch** to the "O" position on the rear of the CDT to power off the system.

11. Unplug the **Power Cord** from the wall outlet.

12. Press the **Open** button on the **Front Panel** of the CDT.

13. Pull forward on the **Front Panel** to expose the device **Tray**.

14. Remove the SD card from the **SD Card Slot** on the left side.

15. Close the **Front Panel** by pushing it into the unit and push the **Open** button until it locks.

16. Plug the **Power Cord** into the wall outlet.

17. Toggle the **Power Switch** to the "I" position on the rear of the CDT to power on the system.

18. The CDT is now ready for use.

WARNING: Disconnect the power cord from the wall outlet before servicing to avoid the possibility of electric shock.

WARNING: Turn the system off before opening the front panel to avoid the possibility of electric shock.

Checking the Software Version

The software version may be checked, following these steps:

1. Toggle the **Power Switch** to the "O" position on the rear of the CDT to power off the system.

2. Toggle the **Power Switch** to the "I" position on the rear of the CDT to power on the system.

3. While the system is starting up, press the **Cancel** button one time.

4. Observe the LED lights (**System** and **Cartridge**) and count the number of green flashes from each one. For example, **System** light flashing 2 times, and **Cartridge** light flashing 8 times indicates software version 2.8.

5

Chapter 5: Troubleshooting

Status Indicators

The front panel includes LED-style indicator lights to provide overall status of the CDT.

The front panel LED lights will flash to signify the status of the system. Each light has multiple states. Green indicates proper operation, yellow indicates that an action will be required soon, such as replacing the UVC cartridge, and red indicates an error condition.

The system will be inoperable if any of the lights are red and action must be taken to restore proper function.

Here is a summary of the LED lighting on the front panel showing indicator status for the **System** and **Cartridge**:

- The **System LED** indicates the state of the CDT.

  The following LED lighting conditions will be presented:

  - Slow flashing green color indicates that the system is in stand-by mode. The **Cartridge** LED light will be illuminated with its current status.

- Flashing green indicates that the system is starting up or warming up from a stand-by mode session.
- Green indicates system is functional and ready for use.
- Red and flashing red indicate a fault/error condition.

NOTE: If the red System LED is illuminated, the CDT should be powered down and troubleshooting steps should be taken as described in the *Troubleshooting* section.

- The **Cartridge LED** indicates the remaining life of the cartridge, which contains the ultraviolet C (UVC) bulbs and other perishable items.

  The following LED lighting conditions will be presented:

  - Green indicates 100% to 25% of cycles remaining.
  - Yellow indicates 25% to 1% of cycles remaining.
  - Red indicates that the cartridge needs to be replaced.

  NOTE: A Cartridge nearing the end of its life may flash the Cartridge LED yellow and return to green due to reduced output (25% to 1% range) and/or heat levels.

  NOTE: If the red Cartridge LED is illuminated, the CDT should be powered down for a Cartridge replacement as described in the *Installing the Cartridge* section.

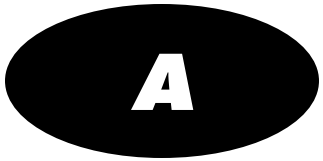
Troubleshooting Common Problems

The following table lists common problems, their possible causes, and how to solve them.

Problem	Possible Causes	Solutions
The System LED flashes red.	There is a device jammed in the System.	Check the Cartridge for any items/devices stuck in the cartridge. Power off the System prior to opening the Front Panel.
	There is a problem with the Cartridge.	Try installing the Cartridge again or replace it with a new Cartridge.
	The software has become corrupted.	Reinstall software.
The Cartridge LED is red.	A Cartridge is not installed.	Install a Cartridge.*
	The Cartridge is not seated properly.	Remove the Cartridge and try reseating in the System.*
	Cartridge needs replaced as it reached its life span.	Install a new Cartridge.*
	There is a device or something in the rollers of the Cartridge.	Open the System and remove any devices or other items in the rollers of the Cartridge.*
		*Power off the System prior to opening the Front Panel.

Problem	Possible Causes	Solutions
The Cartridge LED is yellow.	The Cartridge is nearing end of life.	Order a new Cartridge and prepare to replace the consumed Cartridge when the Cartridge LED turns red.
The LED lights are not illuminated on front of the System.	The power cord is disconnected. The Front Panel is not fully closed. A fuse may be blown.	Check the power cables. Check the power supply switch on the rear panel. Depress the Open button until it is flush with the System face. Then slide the tray in firmly until it locks into place. Contact Technical Support for replacement fuse information.
The System flashed the red Cancel button.	A device is left in the System.	Switch off and unplug the System prior to opening the Front Panel. Open the unit and remove any jammed or left behind devices. The knurled knobs on the side of the Cartridge may assist in rolling back the jammed device.

Problem	Possible Causes	Solutions
There is a chattering noise in the System.	The Cartridge is not installed properly. The Cartridge drive belt is worn. The device being disinfected is not supported at this time. A jam has occurred in the feed system.	Remove the Cartridge and try reseating in the unit.* Install a new Cartridge.* Try disinfecting a different type of device. Press the Open button, slide the tray forward, and remove any jammed object and re-process. Continued jamming may reflect that the device cannot be disinfected in the System.* * Switch off and unplug the System prior to opening the Front Panel.



Appendix A: Hazardous Material Information

Materials of Construction

Daylight Medical has set very stringent standards for evaluating products to ensure the marketing of regulatory compliant products worldwide.

We do not intentionally add, nor are we aware, that the products or packaging contain the following materials:

- Mercury, except as used in lamp applications (for example, scanning lamps, backlit LCDs).
- Cadmium, except as used as thick film inks on printed circuit boards.
- Hexavalent Chromium, except as used as thick film inks on printed circuit boards, as chromate conversion coatings on metal surfaces, and as a photoresist on glass panels of cathode ray tubes.
- Polybrominated diphenyl ethers and polybrominated biphenyls.

- Bioavailable arsenic (small amounts of arsenic used in glass, LEDs, and semiconductors are not considered to be bioavailable).
- Bioavailable crystalline silica (small amounts of crystalline silica are used in certain paints, coatings, and filler materials).
- Polychlorinated biphenyls (PCBs).
- Asbestos.
- Organic tin (not used in tin lead solder applications).
- Ozone-depleting substances such as chlorofluorocarbons, methyl chloroform, and carbon tetrachloride.

Matériaux de Construction

Afin d'obtenir les certificats de conformité de ses produits dans le monde entier, Daylight Medical utilise les standards d'évaluation les plus contraignants pour tester ses produits.

Daylight Medical assure notamment n'avoir ajouté ou avoir été informé que soit ajouté les composants suivants dans son produit et son emballage:

- *Mercure, sauf dans le cas de systèmes d'éclairage (lampe à balayage, rétroéclairage LCD).*
- *Cadmium, à l'exception des encres de couche épaisse sur les circuits imprimés.*
- *Chrome hexavalent, à l'exception des encres de couche épaisse sur les circuits imprimés, des protection de surface métallique et des photo résistances de tubes cathodiques.*
- *Des éthers de diphényl polybromé ou des biphényls polybromés.*

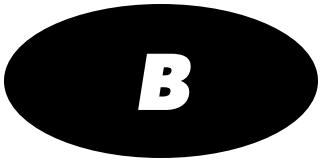
- *Arsenic (de très faible quantité d'arsénic sont présents dans le verre, les leds et les semi-conducteurs sans portée atteinte à l'organisme).*
- *Cristaux de silicium.*
- *Biphenyls polychlorés.*
- *Amiante.*
- *Matières organiques.*
- *Substances portant atteinte à la couche d'ozone tels que des carbones chlorofluorés du chloroforme et des tétrachlorures de carbone.*

Manufacturing

During manufacturing operations that produce Daylight Medical products (including packaging), no ozone depleting substances (such as chlorofluorocarbons, methyl chloroform, and carbon tetrachloride) are used.

Fabrication

Aucun composant susceptible de détruire la couche d'ozone ne sont utilisés lors de la fabrication (emballage inclus) des produits Daylight Medical.



Appendix B: Specifications

Specifications (English)

System:	Integrated system for device disinfection, cartridge with ultraviolet C (UVC) bulbs.
Cartridge:	Two ultraviolet C (UVC) bulbs, UVC sensors, transport rollers, microcontroller, drive stepper motor and fans.
UVC Bulb:	Wattage 27 Current 800 mA Voltage 34 V UVC Watts 7.5
Dimensions:	Height: D6000 - 5.25 in (13.3 cm), D7000 - 23.125 in (60.64 cm) Width: D6000 - 15 in (38.1 cm), D7000 - 15 in (38.1 cm) Depth: D6000 - 20 in (50.8 cm); D7000 - 14 in (35.56 cm)
Entry Slot Device Size:	Height (maximum): 1.0 in (2.5 cm) Width (maximum): 8.0 in (20.3 cm) Depth (maximum): 10.8 in (30.5 cm)
Weight:	Less than 44 lbs. (18.1 kg)

Power Supply:	Internal: 100-240 VAC, 50-60 Hz
Ballast:	Line Current (A): 0.53 – 0.45 – 0.19 Input Power (W): 54 Maximum Current THD (%): ≤ 10 Ballast Type: Electronic
Noise:	Idle: <35dBA Operating: <40dBA
Environmental:	*Operating:* Temperature: 40 to 86°F (4 to 30°C) Humidity: 20 to 80% (non-condensing) *Shipping and Storage:* Temperature: 30 to 100°F (2 to 38°C) Humidity: 20 to 85% (non-condensing)
Compliance & Regulatory:	Safety IEC61010-1 2nd edition, Safety IEC61010-2-040 (particular to disinfection equipment), and EMC IEC60601-1-2. Class B. FDA 880.6890 General Purpose Disinfectants.
Classification:	Class 1 equipment, Product Code LRJ, Disinfectant, medical devices.

Specifications (French)

Système:	Système intégré pour la désinfection de l'appareil, avec cartouche d'ampoules ultraviolets C (UVC).
Cartouche:	Deux ampoules ultraviolets C (UVC), capteurs UVC, rouleaux de transport, microcontrôleur, moteur d'entraînement pas à pas et ventilateurs.
Ampoule UVC:	Puissance 27 Watts Courant 800 mA Tension 34 V UVC 7,5 Watts
Dimensions:	Hauteur: D6000 - 13.3 cm), D7000 - 60.64 cm Largeur: D6000 - 38.1 cm, D7000 - 38.1 cm Profondeur: D6000 - 50.8 cm, D7000 - 35.56 cm
Dimension de la fente d'entrée de l'appareil:	Hauteur (maximale): 2,5 cm Largeur (maximale): 20,3 cm Profondeur (maximale): 30,5 cm
Poids:	Moins de 18 kg
Alimentation:	Interne: 100-240 VAC, 50-60 Hz
Ballast:	Courant de ligne: 0.53 - 0,45 - 0,19 A Puissance d'entrée: 54 W THD actuelle maximale (%): ≤ 10 Type de ballast: électronique

Bruit:	En veille: < 35 dBA En fonctionnement: < 40 dBA
Conservation :	*En fonctionnement:* Température: entre 4 et 30 °C Humidité: 20 à 80% (sans condensation) *Transport et de stockage:* Température: entre 2 et 38 ° C Humidité: 20 à 85% (sans condensation)
Conformité et réglementation:	Sécurité IEC61010-1 2ème édition, sécurité IEC61010-2-040 (notamment pour l'équipement de désinfection), et EMC IEC60601-1-2. Classe B. FDA 880.6890 désinfectants à usage général.
Classification:	Equipement de classe 1, code produit LRJ, produits désinfectants, dispositifs médicaux.